



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

It seems as if more recently the polyandric institutions were showing a tendency to become combined with polygyny. The author observed several instances where two brothers had two wives, instead of one, each of them being evidently the wife of both, but what he saw of it was not found sufficient to serve as a basis for generalisations. In this instance, as everywhere throughout the book, the author shows himself in possession of that rare ability not always found with ethnological writers of distinguishing between the facts observed and his, or his interpreters', interpretations of the same. In every line of the book we can tell exactly what he saw, or what he considers to be based on sufficiently trustworthy report to be offered as facts, or what are hypotheses still wanting further investigation. The book would be perfectly admirable merely for the sake of this clear distinction between fact and theory, even if it were not so for the astonishing mass of material that it places at our disposal. No better instance of the thoroughness that characterises the author's proceedings can be mentioned than the 72 genealogical tables of Toda families, comprising almost all of the 800 people that compose the tribe, which form the basis of his explanations of family law, and which are in themselves one of the most valuable documents ever furnished to ethnology.

M. K. G.

**The Geology of the Parapara Subdivision, Karamea, Nelson.**

**James Mackintosh Bell, assisted by Ernest John Herbert Webb and Edward De Courcy Clarke.** Bulletin No. 3 (New Series), New Zealand Geological Survey. Wellington, New Zealand, 1907.

The newer regions of the world are geographically interesting for two chief reasons. In the first place, the great development in recent years of land form description and analysis has bred a strong desire to see in how far the systematic nomenclature is applicable to the newer and hitherto scientifically undescribed lands. Each new exploration, each new description, is a matter of consequence, as it tests the reliability and fitness both of our physiographic vocabulary and, among other things, of our modern view of uniformitarianism as applied to the origin and development of land forms.

These new studies are of interest, in the second place, because they increase our knowledge of the limits of the material resources available to man. Upon this second point depends a whole train of geographic circumstances, for the resources of the earth are a very large part of that total environment which conditions and therefore explains man's activities and welfare. The progress of nations and even races and the nature of their relations are very closely associated with the material resources of the lands they occupy. Furthermore, and in so far as geography is a study of distributions, the occurrence and future discovery of material resources is a matter of great moment, because it constitutes the chief reason why the populations of the earth are distributed as they now are and why profound changes in present distributions may be expected in the future, with the opening up of new sources of wealth.

It is for these reasons that the report before us, though primarily economic and geologic, is also of geographic interest. It deals with the limits of resources in the area considered and presents clear descriptions of physiographic types. These two phases of the report will be briefly set forth as follows:

The main physiographic features of the Parapara area, the most northerly part of the South Island of New Zealand, are: (1) a mountainous old land, (2) uplands representing faulted blocks of an ancient coastal plain, and (3) the

modern coastal plain, formed for the most part by the flat lower courses of the streams and the confluence of their deltas along the littoral.

The old land consists of ancient (early Paleozoic) schists, phyllites, quartzites, carbonates, grauwackes, and the like, and intrusive igneous rocks included in them. These have been profoundly disturbed by regional crustal deformation. The old land represents an ancient mountain range once maturely dissected and now occupying its comparatively great elevation, not so much on account of its original folding as on account of broad secular upwarp in relatively recent geological time. One sees generally in this province the rounded outlines so characteristic of elevated land surfaces subjected previous to the last uplift to long-continued subaerial erosion. South of this province the rounded outlines are lost on account of the greater dissection of the old surface and the fissile character of the strata.

The uplands fronting the old land are represented in part by flat-lying or gently dipping Miocene strata, in part by truncated and steeply inclined older strata, the latter a sea terrace upon which the Miocene deposits were originally laid, but from which they have since been stripped by normal erosion. At the inner edge of the uplands area (2,000 feet A. T.) the general continuity is broken by narrow water-courses. Toward the outer margin there are spacious floodplains bordered by outliers of the uplands or by terraces cut in horizontal strata.

The modern coastal plain has a patchy development occurring chiefly at the mouths of the principal streams. It owes its character presumably to the slight modification of ordinary deltas whose confluence with each other and with the floodplains already noted yields a low and narrow coastal plain of recent development. The ultimate cause for the origin of the coastal plain is to be found in the post-Miocene uplift which functioned the present wide dissection of Miocene strata and their redeposition as recent deposits at the present lower level. The regular shore features are those appropriate to coastal plains of recent origin. Low sand reefs enclosing small lagoons occur on the outer fringes of the deltas at high tide, while at low tide the streams discharge over wide mud flats in numerous distributaries.

The point of principal interest in connection with the resources of the region relates to the utilization of the remarkable deposits of iron ore which occur in such great quantities. The ore is of high average quality and well suited for the manufacture of iron and steel. A single one of the three blocks of iron ore in the region, the Washbourn block, is estimated to contain over 22,000,000 tons of ore. Furthermore, these deposits are all in highly accessible localities,—nowhere more than a few miles from the seashore. Their occurrence at the surface is another important favouring circumstance, as it would enable quarrying on the cheap open-cut system. The only unfavourable condition is the scarcity of fuel in the immediate vicinity of the deposits. However, the occurrence of high-class coal 145 miles away by sea would seem to enable the acquisition of fuel at a cost consistent with the profitable undertaking of extensive metallurgical operations.

The author points out that the world's supply of high-grade iron ore is rapidly decreasing, owing to the enormous annual production of iron necessitated by modern methods of construction. He reminds us that, according to the estimation of very good authorities, the world's visible supply of high-grade ore suitable for manufacturing purposes will be exhausted within fifty years at the

present rate of consumption. The day does not seem distant, therefore, when these vast New Zealand deposits of high-grade ores will be appreciated and their utilization begun.

I. B.

**The Oceanic Languages, their grammatical structure, vocabulary and origin.** By D. Macdonald, D.D., of the New Hebrides Mission, member of the Société d'Ethnographie, Paris. Henry Frowde: London, Edinburgh, Glasgow, New York, and Toronto, 1907. Pp. xv, 352, and two maps.

Not in the slightest degree indicated upon the title of this long-awaited contribution to our knowledge of the Western Pacific, the really important fact is that this work consists of a grammar and dictionary of the language of Efate in the New Hebrides. The author in his preface calls it in so many words "a complete dictionary of the language"; with more precaution and greater precision we may note from actual tally that the dictionary contains 3,657 entries. At last we have our first dictionary of any Melanesian language, the Fijian so interestingly recorded in Hazlewood's dictionary being a mixed speech in which the Polynesian element is preponderant. It has been a long wait. We have a Hawaiian dictionary published at LahainaLuna in 1845. Since that time the life of a man has passed before Melanesia receives something better than brief and irregular word-lists scattered through fugitive publications. Dr. Macdonald has been at work upon his task for thirty-five years, and he may well be proud that he has witnessed the production of this, the third and crowning volume of his studies upon the New Hebridean languages, the former volumes having been published in Melbourne in 1889 and 1891 at the charges of the Colony of Victoria, and the volume now in hand similarly appears through the generous liberality of the Commonwealth of Australia. We feel sure that Dr. Macdonald's admirably urged theory of the Semitic origin of the Malayo-Polynesian (including therein the Melanesian) will not be passed without a vigorous challenge from the philologists who specialize in that speech family or families. Yet even should the theory be overthrown and the comparative philological apparatus through which it is developed be cast aside as lumber, that does not in the least affect the value of the dictionary as our first vocabulary of Melanesian speech. The first ordered investigation of the complex of tongues in the western archipelagoes of the South Pacific was made by H. C. von der Gabelentz upon unfortunately scanty and not always accurate data and was published in 1861, when Dr. Macdonald was entering upon that life work so properly crowned with the bays by this monument of his own erection. Since then the only considerable addition has been Codrington's "Melanesian Languages" (1885) and that pretends to no more than comparative grammar. Our author has now produced the first dictionary, given us the first codified data, and thereby has made it possible to give intelligent study to the various scattered lists of words of the island area from New Caledonia to New Guinea.

W. C.

**Die Gletscher. Von Dr. Hans Hess, Königl.-Gymnasial-Professor in Ansbach.** With 72 figures (8 full-page half-tones) and four Maps. Braunschweig: F. Vieweg & Sohn, 1904.

The bibliography of glaciers comprises many titles, among which are several books from the times of von Böhm (1770) and de Saussure (1786) to the present day, but for twenty years the student has turned to A. Heim's "Handbuch der